

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F04B35/04 F04B49/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 176 683 B1 (YANG SOON-BAE) 23 January 2001 (2001-01-23)	1-5, 7-9, 11-13, 15, 16, 18-31
Y	abstract column 2, lines 7-38 column 3, lines 11-33 column 4, line 37 - column 5, line 16 column 6, lines 1-14 claim 3	6, 10, 14, 17
Y	----- US 2003/161734 A1 (KIM TAE-DUK) 28 August 2003 (2003-08-28) abstract; figure 3 paragraph '0003! paragraph '0008! paragraphs '0014!, '0015! ----- -/--	6, 10, 14, 17

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *A* document defining the general state of the art which is not considered to be of particular relevance
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- *P* document published prior to the international filing date but later than the priority date claimed

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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- * & * document member of the same patent family

Date of the actual completion of the international search

18 April 2005

Date of mailing of the international search report

22/04/2005

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INTERNATIONAL SEARCH REPORT

Inter

Application No.

PCT/BR2004/000240

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>US 2003/219341 A1 (DOVEY STEPHEN J ET AL) 27 November 2003 (2003-11-27) abstract paragraph '0013! paragraph '0015! -----</p>	1-31

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US 2003161734	A1	28-08-2003	KR	2003071359 A	03-09-2003
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US 2003219341	A1	27-11-2003	EP	1143146 A2	10-10-2001
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